Mr. Bob J. Grover
Bremen Corporation
405 North Industrial Drive
Bremen, IN 46506

Re: Significant Source Modification No:
099-10314-00033

Dear Mr. Grover:

Bremen Corporation applied for a Part 70 operating permit on December 11, 1996 for vinyl-coated foam product manufacturing source. An application to modify the source was received on November 5, 1998. The source requested that the modification be processed as a significant modification to a Part 70 permit, not yet issued, instead of a construction permit pursuant to the 326 IAC 2-1 rules in place when the application was received at IDEM, OAM. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

One (1) catalytic oxidizer with a heat input capacity of 4.6 million British thermal units per hour, exiting at stack 32.

The addition of the catalytic oxidizer will result in an increase in VOC usage and PM and PM_{10} emissions at Processes 1, 2, 3 and 4 and Areas 1, 2 and 3. Therefore, Processes 1, 2, 3 and 4 and Areas 1, 2 and 3 will be considered part of the modification. The source is limited to make the requirements of 326 IAC 2-2, Prevention of Significant Deterioration, not applicable. Therefore, all emission units are included in the permit. The source will now consist of the following emission units and pollution control devices:

(a) One (1) spray room, known as Process 1, consisting of two (2) manual spray booths and three (3) automatic spray booths equipped with high volume, low pressure and airless spray guns, exhausting to dry filters and a catalytic oxidizer with a heat input capacity of 4.6 million British thermal units per hour, and exiting at stack 32, capacity: 9,153 pounds of paint and topcoat per hour.

(b) One (1) dip room, known as Process 2, consisting of four (4) dip tanks and one (1) cleaning station, exhausting to a catalytic oxidizer with a heat input capacity of 4.6 million British thermal units per hour, and exiting at stack 32, capacity: 3,162 pounds of paint, topcoat, and cleaning blend per hour.

(c) One (1) final finish area, known as Process 3, consisting of two (2) hand-spray painting booths equipped with airless spray guns, exhausting to dry filters and a catalytic oxidizer with a heat input capacity of 4.6 million British thermal units per hour, and exiting at stack 32, capacity: 357 pounds of paint and topcoat per hour.

(d) One (1) mixing process, known as Process 4, exhausting to a catalytic oxidizer with a heat input capacity of 4.6 million British thermal units per hour, and exiting at stack 32, capacity: 12,671 pounds of coatings mixed per hour.

(e) One (1) assembly area, known as Area 1, consisting of hand application of adhesive and four (4) glue spraying booths equipped with high volume, low pressure spray guns, exhausting to stack 12, capacity: 133 pounds of adhesives per hour.

(f) One (1) assembly area, known as Area 2, consisting of hand application of adhesive, exhausting to stack 13, capacity: 15 pounds of adhesives per hour.

(g) One (1) final finish area, known as Area 3, consisting of one (1) automatic silk screener and one (1) manual silk screener, capacity: 5 pounds of ink per hour.

(h) One (1) natural gas fired air makeup unit, capacity: 5 million British thermal units per hour.

(i) One (1) natural gas fired air makeup unit, capacity: 1.75 million British thermal units per hour.

(j) One (1) natural gas fired air makeup unit, capacity: 7.5 million British thermal units per hour.

(k) Six (6) natural gas fired heaters, capacity: 0.2 million British thermal unit per hour, each.

(l) One (1) natural gas fired conveyor line, capacity: 0.2 million British thermal unit per hour.

(m) Two (2) natural gas fired hot water boilers, capacity: 0.28 million British thermal unit per hour, each.

(n) One (1) natural gas fired office heater, capacity: 1 million British thermal unit per hour.

(o) One (1) above ground storage tank, capacity: 4,000 gallons of MEK and Toluene.

The proposed Significant Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3). If there are no changes to the proposed construction of the emission units, the source may begin operating on the date that IDEM receives an affidavit of construction pursuant to 326 IAC 2-7-10.5(h). If there are any changes to the proposed construction the source can not operate until an Operation Permit Validation Letter is issued.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, contact CarrieAnn Ortolani, c/o OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, at 516-691-3395 or in Indiana at 1-800-451-6027 (ext 516-691-3395).

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments
CAO/MES
cc: File - Marshall County
U.S. EPA, Region V
Air Compliance Section Inspector - Paul Karkiewicz
Compliance Data Section - Mindy Jones
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

PART 70 SIGNIFICANT SOURCE MODIFICATION
OFFICE OF AIR MANAGEMENT

Bremen Corporation
405 North Industrial Drive
Bremen, Indiana 46506

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 099-10314-00033	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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SECTION A SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary vinyl-coated foam product manufacturing source.

Responsible Official:	Bob J. Grover
Source Address:	405 North Industrial Drive, Bremen, Indiana 46506
Mailing Address:	405 North Industrial Drive, Bremen, Indiana 46506
Phone Number:	219-546-4238
SIC Code:	3069
County Location:	Marshall
County Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD Rules; Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

One (1) catalytic oxidizer with a heat input capacity of 4.6 million British thermal units per hour, exiting at stack 32.

This stationary source will now consist of the following emission units and pollution control devices:

(a) One (1) spray room, known as Process 1, consisting of two (2) manual spray booths and three (3) automatic spray booths equipped with high volume, low pressure and airless spray guns, exhausting to dry filters and a catalytic oxidizer with a heat input capacity of 4.6 million British thermal units per hour, and exiting at stack 32, capacity: 9,153 pounds of paint and topcoat per hour.

(b) One (1) dip room, known as Process 2, consisting of four (4) dip tanks and one (1) cleaning station, exhausting to a catalytic oxidizer with a heat input capacity of 4.6 million British thermal units per hour, and exiting at stack 32, capacity: 3,162 pounds of paint, topcoat, and cleaning blend per hour.

(c) One (1) final finish area, known as Process 3, consisting of two (2) hand-spray painting booths equipped with airless spray guns, exhausting to dry filters and a catalytic oxidizer with a heat input capacity of 4.6 million British thermal units per hour, and exiting at stack 32, capacity: 357 pounds of paint and topcoat per hour.

(d) One (1) mixing process, known as Process 4, exhausting to a catalytic oxidizer with a heat input capacity of 4.6 million British thermal units per hour, and exiting at stack 32, capacity: 12,671 pounds of coatings mixed per hour.

(e) One (1) assembly area, known as Area 1, consisting of hand application of adhesive and four (4) glue spraying booths equipped with high volume, low pressure spray guns, exhausting to stack 12, capacity: 133 pounds of adhesives per hour.

(f) One (1) assembly area, known as Area 2, consisting of hand application of adhesive, exhausting to stack 13, capacity: 14.9 pounds of adhesives per hour.

(g) One (1) final finish area, known as Area 3, consisting of one (1) automatic silk screener and one (1) manual silk screener, capacity: 4.12 pounds of ink per hour.

(h) One (1) natural gas fired air makeup unit, capacity: 5 million British thermal units per hour.

(i) One (1) natural gas fired air makeup unit, capacity: 1.75 million British thermal units per hour.

(j) One (1) natural gas fired air makeup unit, capacity: 7.5 million British thermal units per hour.

(k) Six (6) natural gas fired heaters, capacity: 0.2 million British thermal unit per hour, each.

(l) One (1) natural gas fired conveyor line, capacity: 0.2 million British thermal unit per hour.

(m) Two (2) natural gas fired hot water boilers, capacity: 0.28 million British thermal unit per hour, each.

(n) One (1) natural gas fired office heater, capacity: 1 million British thermal unit per hour.

(o) One (1) above ground storage tank, capacity: 4,000 gallons of MEK and Toluene.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Permit No Defense [IC 13]

This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions [326 IAC 2-7-1]

Terms in this approval shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Significant Source Modification [326 IAC 2-7-10.5(h)] [326 IAC 2-7-2(d)]

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

(a) The attached affidavit of construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.

(b) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.

(c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

(d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.

However, in the event that the Title V application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:

(e) If the Title V draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification (SSM) will be included in the Title V draft.

(f) If the Title V permit has gone thru final EPA proposal and would be issued ahead of the SSM, then the SSM will go thru a concurrent 45 day EPA review. Then the SSM will be incorporated into the final Title V permit at the time of issuance.

(g) If the Title V permit has not gone thru final EPA review and would be issued after the SSM is issued, then the SSM would be added to the proposed Title V permit, and the Title V permit will be issued after EPA review.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this approval or required by an applicable requirement, any application form, report, or compliance certification submitted under this approval shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, on the attached Certification Form, with each submittal.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this approval, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this approval, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM. IDEM, OAM, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this approval.

(b) Any application requesting an amendment or modification of this approval shall be submitted to:
Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015

Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this approval:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided in this permit, all air pollution control equipment listed in this approval and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.6 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using ambient air quality modeling pursuant to 326 IAC 1-7-4.

Testing Requirements [326 IAC 2-7-6(1)]

C.7 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAM, within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAM, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this permit. All monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

C.9 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this approval until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.

(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.10 Temperature Gauge Specifications

Whenever a condition in this permit requires the measurement of temperature at any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.11 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this approval;

(3) The Compliance Monitoring Requirements in Section D of this approval;

(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this approval; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this approval. CRP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this approval by the Permittee and maintained on site, and is comprised of:

(A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this approval; and

(B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this approval, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the approval unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.

(c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the approval conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the approval, and such request has not been denied; or

(3) An automatic measurement was taken when the process was not operating; or

(4) The process has already returned to operating within "normal" parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.12 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this approval exceed the level specified in any condition of this approval, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate approval conditions may be grounds for immediate revocation of the approval to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.13 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) or appointed representative upon request.

(b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAM, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

(c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.14 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

(a) With the exception of performance tests conducted in accordance with Section C- Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this approval shall be performed at all times the equipment is operating at normal representative conditions.

(b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this approval is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this approval.

(c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

(d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

(e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

(f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.15 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

(1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);

(2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.

(b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

C.16 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

(a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report,

or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Records of required monitoring information shall include, where applicable:

(1) The date, place, and time of sampling or measurements;

(2) The dates analyses were performed;

(3) The company or entity performing the analyses;

(4) The analytic techniques or methods used;

(5) The results of such analyses; and

(6) The operating conditions existing at the time of sampling or measurement.

(c) Support information shall include, where applicable:

(1) Copies of all reports required by this approval;

(2) All original strip chart recordings for continuous monitoring instrumentation;

(3) All calibration and maintenance records;

(4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this approval, and whether a deviation from a approval condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

(d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance.

C.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) The reports required by conditions in Section D of this approval shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Unless otherwise specified in this approval, any notice, report, or other submission required by this approval shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

(c) Unless otherwise specified in this approval, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) The first report shall cover the period commencing on the date of issuance of this approval and ending on the last day of the reporting period.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(a) One (1) spray room, known as Process 1, consisting of two (2) manual spray booths and three (3) automatic spray booths equipped with high volume, low pressure and airless spray guns, exhausting to dry filters and a catalytic oxidizer with a heat input capacity of 4.6 million British thermal units per hour, and exiting at stack 32, capacity: 9,153 pounds of paint and topcoat per hour.

(b) One (1) dip room, known as Process 2, consisting of four (4) dip tanks and one (1) cleaning station, exhausting to a catalytic oxidizer with a heat input capacity of 4.6 million British thermal units per hour, and exiting at stack 32, capacity: 3,162 pounds of paint, topcoat, and cleaning blend per hour.

(c) One (1) final finish area, known as Process 3, consisting of two (2) hand-spray painting booths equipped with airless spray guns, exhausting to dry filters and a catalytic oxidizer with a heat input capacity of 4.6 million British thermal units per hour, and exiting at stack 32, capacity: 357 pounds of paint and topcoat per hour.

(d) One (1) mixing process, known as Process 4, exhausting to a catalytic oxidizer with a heat input capacity of 4.6 million British thermal units per hour, and exiting at stack 32, capacity: 12,671 pounds of coatings mixed per hour.

(e) One (1) assembly area, known as Area 1, consisting of hand application of adhesive and four (4) glue spraying booths equipped with high volume, low pressure spray guns, exhausting to stack 12, capacity: 133 pounds of adhesives per hour.

(f) One (1) assembly area, known as Area 2, consisting of hand application of adhesive, exhausting to stack 13, capacity: 14.9 pounds of adhesives per hour.

(g) One (1) final finish area, known as Area 3, consisting of one (1) automatic silk screener and one (1) manual silk screener, capacity: 4.12 pounds of ink per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6 (New facilities; General reduction requirements) and CP 099-4592-00033, issued on November 2, 1995, these facilities shall use the Best Available Control Technology (BACT). The Best Available Control Technology (BACT) for this source is the use of a catalytic oxidizer on Process 1, Process 2, Process 3 and Process 4, the use of dip coating at Process 2, the use of airless or high volume, low pressure spray guns or an application with a higher transfer efficiency at all spray applications, and the use of coatings with a maximum VOC content of 6.98 pounds per gallon of coating less water.

The catalytic oxidizer shall operate at all times when Process 1, Process 2, Process 3 and Process 4 are in operation. When operating, the catalytic incinerator shall maintain a minimum operating temperature of 550 degrees Fahrenheit or a temperature determined in the most recent stack test to maintain at least ninety-five percent (95%) destruction of VOC captured. In addition, the catalytic oxidizer shall be tested once every two and one half (2.5) years for efficiency using methods approved by the Commissioner.

D.1.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

(a) Since only Process 1, Process 2, Process 3 and Process 4 will be controlled by the catalytic oxidizer, the VOC usage and VOC emissions shall be limited such that:

VOC usage at Area 1 + VOC usage at Area 2 + VOC usage at Area 3 + (VOC usage at Processes 1, 2, 3 and 4 * (1 - 0.95)) = VOC emissions

The total VOC usage shall in no case exceed 4,980 tons per year, based on a twelve (12) consecutive month rolling total. The VOC emissions, as determined by the equation, shall be limited to less than 249 tons per year, based on a twelve (12) consecutive month rolling total. This will limit the VOC emissions from the entire source to less than 250 tons per year.

(b) The PM and PM_{10} emissions shall be limited to 54.3 pounds per hour. This will be achieved by using dry filters at all times when the coating operations at Process 1 and Process 3 are in operation and the control efficiency shall not be less than ninety-eight percent (98.0%). Pursuant to 326 IAC 2-2, the PM and PM_{10} emissions shall be less than 250 tons per year.

(c) Operation Condition 5 from CP 099-4592-00033, issued on November 2, 1995, which requires that the total amount of volatile organic compounds delivered to the applicator, including cleanup solvents, shall not exceed 249 tons per year calculated on a 52-week rolling average and during the first 52 weeks of operation, commencing on November 11, 1994, VOC usage shall be limited such that, total VOC used divided by weeks of operation shall not exceed 9,577 pounds per week is not applicable because, with the addition of the catalytic oxidizer, the VOC usage may increase without VOC emissions exceeding 249 tons per year. This requirement is replaced with (a) of this condition.

Compliance with these limits makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

D.1.3 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to CP 099-4592-00033, issued on November 2, 1995, the particulate matter (PM) from the coating operations shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.4 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Organic Solvent Degreasing Operations: Cold Cleaner Operation), the owner or operator of the cold cleaning facility shall:

(a) Equip the cleaner with a cover;

(b) Equip the cleaner with a facility for draining cleaned parts;

(c) Close the degreaser cover whenever parts are not being handled in the cleaner;

(d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(e) Provide a permanent, conspicuous label summarizing the operating requirements;

(f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

D.1.6 Testing Requirements [326 IAC 2-7-6(1),(6)]

During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform testing on the catalytic oxidizer to determine the VOC destruction efficiency. Testing of the catalytic oxidizer shall be repeated at least once every two and one half (2.5) years for efficiency using methods approved by the Commissioner In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facilities are in compliance.

D.1.7 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.1.1 and D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.8 VOC Emissions

Compliance with Condition D.1.2 shall be demonstrated at the end of each month based on the total volatile organic compound usage and emissions for the most recent twelve (12) month period.

D.1.9 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times when the the spray coating in Process 1 and Process 3 is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.10 Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating stack 32 while one or more of the spray booths at Process 1 and Process 3 are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

D.1.11 Parametric Monitoring

(a) Continuous records of the thermal oxidizer internal combustion zone temperature shall be

kept using a chart recorder when Process 1, 2, 3, or 4 is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, when operating, the catalytic incinerator shall maintain a minimum operating temperature of 550 degrees Fahrenheit or a temperature determined in the most recent stack test to maintain at least 95 percent overall control efficiency for VOC. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the temperature reading is below 550 degrees Fahrenheit.

The instrument used for determining the temperature shall comply with Section C - Temperature Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

(b) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.12 Record Keeping Requirements

(a) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and the VOC emission limits established in Condition D.1.2.

(1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) A log of the dates of use;

(3) The cleanup solvent usage for each month;

(4) The total VOC usage for each month; and

(5) The weight of VOCs emitted for each compliance period.

(b) To document compliance with Conditions D.1.2, D.1.3, and D.1.10 the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

(c) To document compliance with Conditions D.1.1 and D.1.11, the Permittee shall maintain continuous records of the internal combustion zone temperature of the catalytic oxidizer or indicate that Processes 1, 2, 3, and 4 are not in operation at that time.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.13 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.2(a) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(m) Two (2) natural gas fired hot water boilers, capacity: 0.28 million British thermal unit per hour, each.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate Matter Limitation (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4(a), for Q less than 10 million British thermal units per hour, Pt shall not exceed 0.6. Therefore, the PM emissions from the two (2) natural gas fired hot water boilers, with a heat input capacity of 0.28 million British thermal units per hour, each, will be limited to 0.6 pounds per million British thermal unit. This limitation is based upon the following equation:

$$Pt = 1.09/Q^{0.26}$$

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

Compliance Determination Requirements

D.2.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name: Bremen Corporation
Source Address: 405 North Industrial Drive, Bremen, Indiana 46506
Mailing Address: 405 North Industrial Drive, Bremen, Indiana 46506
Source Modification No.: 099-10314-00033

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

Part 70 Source Modification Quarterly Report

Source Name: Bremen Corporation
Source Address: 405 North Industrial Drive, Bremen, Indiana 46506
Mailing Address: 405 North Industrial Drive, Bremen, Indiana 46506
Source Modification No.: 099-10314-00033
Facility: Processes 1, 2, 3 and 4 and Areas 1, 2 and 3
Parameter: VOC emissions
Limit: Less than 249 tons per year, based on a twelve (12) month rolling total, according to the following equation:

VOC usage at Area 1 + VOC usage at Area 2 + VOC usage at Area 3 + VOC usage at Processes 1, 2, 3 and 4 * (1 - (capture efficiency of catalytic oxidizer * control efficiency of catalytic oxidizer)) = VOC emissions

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

Part 70 Source Modification Quarterly Report

Source Name: Bremen Corporation
Source Address: 405 North Industrial Drive, Bremen, Indiana 46506
Mailing Address: 405 North Industrial Drive, Bremen, Indiana 46506
Source Modification No.: 099-10314-00033
Facility: Processes 1, 2, 3 and 4 and Areas 1, 2 and 3
Parameter: VOC usage
Limit: 4,980 tons per year, based on a twelve (12) consecutive month rolling total

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
FAX NUMBER - 317 233-5967

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES ?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100 TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: _____ PHONE NO. :_____
LOCATION: (CITY AND COUNTY) _____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP: _____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: _____/_____/ 19_____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE_____/_____/ 19____ _____ AM / PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____
INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

*** Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

_____

_____

Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD) for a Source Modification to a Part 70 Operating Permit

Source Background and Description

Source Name:	**Bremen Corporation**
Source Location:	**405 North Industrial Drive, Bremen, Indiana 46506**
County:	**Marshall**
SIC Code:	**3069**
Operation Permit No.:	**T 099-7476-00033**
Operation Permit Issuance Date:	**Not yet issued**
Source Modification No.:	**099-10314-00033**
Permit Reviewer:	**CarrieAnn Ortolani**

The Office of Air Management (OAM) has reviewed a modification application from Bremen Corporation relating to the operation of a catalytic oxidizer at the existing vinyl-coated foam product manufacturing source. The catalytic oxidizer will allow Bremen Corporation to increase their capacity and their potential to emit of VOC while maintaining the current emission limitations which make the source a minor source pursuant to 326 IAC 2-2, Prevention of Significant Deterioration.

History

On November 5, 1998, Bremen Corporation submitted an application to the OAM requesting to add a catalytic oxidizer to their existing plant. Bremen Corporation applied for a Part 70 permit on December 11, 1996. Pursuant to CP 099-4592-00033, issued on November 2, 1995, the source had a VOC emission limit of less than 250 tons per year and no control device. The source is adding the following control device:

> One (1) catalytic oxidizer with a heat input capacity of 4.6 million British thermal units per hour, exiting at stack 32.

The addition of the catalytic oxidizer will result in an increase in VOC usage and PM and PM_{10} emissions at Processes 1, 2, 3 and 4 and Areas 1, 2 and 3. Therefore, Processes 1, 2, 3 and 4 and Areas 1, 2 and 3 will be considered part of the modification. The source is limited to make the requirements of 326 IAC 2-2, Prevention of Significant Deterioration, not applicable. Therefore, all emission units are included in the permit. The source will now consist of the following emission units and pollution control devices:

(a) One (1) spray room, known as Process 1, consisting of two (2) manual spray booths and three (3) automatic spray booths equipped with high volume, low pressure and airless spray guns, exhausting to dry filters and a catalytic oxidizer with a heat input capacity of 4.6 million British thermal units per hour, and exiting at stack 32, capacity: 9,153 pounds of paint and topcoat per hour.

(b) One (1) dip room, known as Process 2, consisting of four (4) dip tanks and one (1) cleaning station, exhausting to a catalytic oxidizer with a heat input capacity of 4.6 million British thermal units per hour, and exiting at stack 32, capacity: 3,162 pounds of paint, topcoat, and cleaning blend per hour.

(c) One (1) final finish area, known as Process 3, consisting of two (2) hand-spray painting booths equipped with airless spray guns, exhausting to dry filters and a catalytic oxidizer with a heat input capacity of 4.6 million British thermal units per hour, and exiting at stack 32, capacity: 357 pounds of paint and topcoat per hour.

(d) One (1) mixing process, known as Process 4, exhausting to a catalytic oxidizer with a heat input capacity of 4.6 million British thermal units per hour, and exiting at stack 32, capacity: 12,671 pounds of coatings mixed per hour.

(e) One (1) assembly area, known as Area 1, consisting of hand application of adhesive and four (4) glue spraying booths equipped with high volume, low pressure spray guns, exhausting to stack 12, capacity: 133 pounds of adhesives per hour.

(f) One (1) assembly area, known as Area 2, consisting of hand application of adhesive, exhausting to stack 13, capacity: 14.9 pounds of adhesives per hour.

(g) One (1) final finish area, known as Area 3, consisting of one (1) automatic silk screener and one (1) manual silk screener, capacity: 4.12 pounds of ink per hour.

(h) One (1) natural gas fired air makeup unit, capacity: 5 million British thermal units per hour.

(i) One (1) natural gas fired air makeup unit, capacity: 1.75 million British thermal units per hour.

(j) One (1) natural gas fired air makeup unit, capacity: 7.5 million British thermal units per hour.

(k) Six (6) natural gas fired heaters, capacity: 0.2 million British thermal unit per hour, each.

(l) One (1) natural gas fired conveyor line, capacity: 0.2 million British thermal unit per hour.

(m) Two (2) natural gas fired hot water boilers, capacity: 0.28 million British thermal unit per hour, each.

(n) One (1) natural gas fired office heater, capacity: 1 million British thermal unit per hour.

(o) One (1) above ground storage tank, capacity: 4,000 gallons of MEK and Toluene.

Existing Approvals

The source applied for a Part 70 Operating Permit on December 11, 1996. The source has been operating under previous approvals including, but not limited to, the following:

(a) CP 099-4592-00033, issued on November 2, 1995; and

(b) A 099-5132, issued on January 9, 1996.

All conditions from previous approvals were incorporated into this Part 70 Significant Source Modification except the following:

(a) CP 099-4592-00033, issued on November 2, 1995

Operation Condition 5:

That the total amount of volatile organic compounds delivered to the applicator, including cleanup solvents, shall not exceed 249 tons per year calculated on a 52-week rolling average. During the first 52 weeks of operation, commencing on November 11, 1994, VOC usage shall be limited such that, total VOC used divided by weeks of operation shall not exceed 9,577 pounds per week. Satisfaction of this condition and all other Operation Conditions shall render PSD Rules 326 IAC 2-2 not applicable in this case.

Reason not incorporated:

With the addition of the catalytic oxidizer, the VOC usage may increase without VOC emissions exceeding 249 tons per year. The limitation will be replaced with a limit that allows for more than 249 tons per year VOC usage, but limits VOC emissions to less than 250 tons per year.

Operation Condition 8:

The final sentence states, "These reports shall include a 52 rolling weekly average of VOC delivered to the coating applicators."

Reason not incorporated:

This permit will require that the reports include a 12 month rolling total of VOC emissions.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
32	Catalytic Oxidizer	25.0	3.0	20,500	120

Recommendation

The staff recommends to the Commissioner that the Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on November 5, 1998. A letter was received on June 1, 1999, requesting review under the revised 326 IAC 2 rules which were promulgated on December 25, 1998. Additional information was received on June 1, 1999.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (pages 1 through 6 of 6).

Potential To Emit Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Pollutant	Potential To Emit (tons/year)
PM	11,945
PM_{10}	11,946
SO_2	0.056
VOC	10,285
CO	8.02
NO_X	9.55

Note: For the purpose of determining Title V applicability for particulates, PM_{10}, not PM, is the regulated pollutant in consideration.

HAPs	Potential To Emit (tons/year)
Xylene	greater than 10
MIBK	greater than 10
DEHP	greater than 10
Toluene	greater than 10
Glycol Ethers	less than 10
MEK	less than 10
Formaldehyde	less than 10
Benzene	less than 10
Dichlorobenzene	less than 10
Hexane	less than 10
Lead	less than 10
Cadmium	less than 10
Manganese	less than 10
Nickel	less than 10
TOTAL	greater than 25

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM_{10} and VOC are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(c) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Justification for a Modification

The Title V permit (not yet issued) is being modified through a Significant Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(f)(4)(A) and (D), any modification with a potential to emit greater than or equal to twenty-five (25) tons per year of particulate matter (PM) or particulate matter with an aerodynamic diameter less than or equal to ten (10) micrometers (PM_{10}) and volatile organic compounds (VOC) shall be processed in accordance with 326 IAC 2-7-10.5, subsection (g).

Source Status

Existing Source PSD Definition (emissions after controls, based upon 8,760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	**Emissions** (tons/year)
PM	6.74
PM_{10}	6.74
SO_2	0.042
VOC	249
CO	1.47
NO_X	6.98
HAP (Toluene)	94.8
HAP (MEK)	120
HAP (Xylene)	13.0
HAP (MIBK)	11.9
HAP (Isophorone)	0.07
HAP (Naphthalene)	0.003
HAP (Chromium)	0.003
HAP (Vinyl Acetate)	0.002
HAP (Lead)	0.03

(a) The limited emissions of the existing source are based on the Technical Support Document (TSD) for CP 099-4592-00033, issued on November 2, 1995.

(b) The existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.

Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the emission units.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM_{10}	SO_2	VOC	CO	NO_X	HAPs
Processes 1, 2, 3 and 4 and Areas 1, 2 and 3 (including catalytic oxidizer)	12.7	12.9	0.012	249	1.69	2.01	150
Two (2) boilers	0.005	0.019	0.001	0.013	0.206	0.245	negligible
Air makeup, heaters and conveyor line, and storage tank	0.139	0.554	0.043	0.401	6.12	7.29	negligible
Total Emissions	12.8	13.5	0.056	249	8.07	9.55	150

(a) Since the VOC emissions from Processes 1 through 4 and Areas 1 through 3 are limited to eighteen percent (18%) of the potential to emit after controls, the PM, PM_{10}, and HAP emissions have also been reduced in this table to eighteen percent (18%) of the potential to emit after controls.

(b) This modification to an existing minor stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2 and 40 CFR 52.21, the PSD requirements do not apply.

(c) The source has requested a VOC limit of less than 250 tons per year to remain a minor stationary source pursuant to 326 IAC 2-2 and 40 CFR 52.21.

County Attainment Status

The source is located in Marshall County.

Pollutant	**Status**
PM_{10}	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

Volatile organic compounds (VOC) and oxides of nitrogen (NO_X) are precursors for the formation of ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. Marshall County has been designated as attainment or unclassifiable for ozone.

Federal Rule Applicability

(a) The one (1) above ground storage tank has a capacity less than 40 cubic feet, therefore, the requirements of 40 CFR Part 60, Subpart K, Ka and Kb, are not applicable.

(b) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

(c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 326 IAC 20; 40 CFR Part 63 and 40 CFR Part 61) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 1-7 (Stack Height Provisions)

Since stack 32 has a potential to emit (before controls) of more than 25 tons per year of PM, the requirements of 326 IAC 1-7 are applicable. Pursuant to 326 IAC 1-7-5(a), all sources having less than twenty-five (25) tons per year of actual emissions (after controls) shall be exempt from the requirements specified in 326 IAC 1-7-3(a). Since stack 32 has PM emissions less than 25 tons per year after controls, the requirements of 326 IAC 1-7-3(a), Actual stack height provisions, are not applicable. If emissions from stack 32 undergo ambient air quality modeling, the source will be required to comply with 326 IAC 1-7-4, Ambient air quality modeling; stack height provisions.

326 IAC 2-2 (Prevention of Significant Deterioration)

(a) In order to remain a minor source pursuant to 326 IAC 2-2 (PSD), the source will limit VOC emissions to less than 250 tons per year. VOC emissions will be limited to less than 250 tons per year, based on a twelve month rolling total. Since only Process 1, Process 2, Process 3 and Process 4 will be controlled by the catalytic oxidizer, the VOC emissions must be determined by use of the following equation:

VOC usage at Area 1 + VOC usage at Area 2 + VOC usage at Area 3 + VOC emissions from combustion + VOC usage at Processes 1, 2, 3 and 4 * (1 - (capture efficiency of catalytic oxidizer * control efficiency of catalytic oxidizer)) = VOC emissions

The potential to emit VOC from the combustion, including the catalytic oxidizer, is 0.525 tons per year. Therefore, the VOC usage at Areas 1, 2, and 3 and the VOC emissions at Processes 1, 2, 3 and 4 are limited to a combined total of less than 249 tons per year, based on a 12 month rolling total (VOC emissions at Processes 1, 2, 3, and 4 = VOC usage at Processes 1, 2, 3 and 4 * (1 - (capture efficiency of catalytic oxidizer * control efficiency of catalytic oxidizer))). The overall control efficiency will be maintained at no less than ninety-five percent (95%). In order for VOC emissions to be limited to 249 tons per year, the total VOC usage must in no case exceed 4,980 tons per year.

(b) The source must also limit PM and PM_{10} emissions to less than 250 tons per year. This will be achieved by using dry filters at all times when the coating operations at Process 1 and Process 3 are in operation. PM and PM_{10} emissions from the coating operations are assumed equal. PM_{10} emissions from all other emission units at this source are greater than the PM emissions. Since potential PM_{10} emissions from the combustion units, including the catalytic oxidizer, are 0.726 tons per year and PM_{10} emissions from Areas 1, 2, and 3, which do not have dry filters and do not exhaust to Stack 32, are 10.9 tons per year, the PM_{10} emissions from Processes 1 and 3 must be limited to less than 238 tons per year, equivalent to 54.3 pounds per hour when operating 8,760 hours per year, in order for the source to remain a minor source pursuant to 326 IAC 2-2, PSD. Since potential PM_{10} emissions before controls from Processes 1 and 3 are 11,934 tons per year, the control efficiency of the dry filters must be no less than ninety-eight percent (98.0 %) in order for the source to remain a minor source of PM and PM_{10} pursuant to 326 IAC 2-2, PSD.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of VOC. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 2-7 (Part 70 Permit Program)

This existing source has submitted their Part 70 permit (T 099-7476-00033) application on December 11, 1996. The equipment being reviewed under this permit shall be incorporated in the submitted Part 70 application.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)

The two (2) natural gas fired hot water boilers will be subject to the requirements of 326 IAC 6-2-4. The two (2) boilers with a capacity of 0.28 million British thermal units per hour, each must have PM emissions of no more than 0.6 pound per million British thermal units in order to comply with the particulate matter emission rate specified by 326 IAC 6-2-4. The limitation is computed using the following equation:

$$Pt = 1.09/Q^{0.26}$$

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

$Pt = 1.09/(0.56)^{0.26} = 0.937$ lb/MMBtu heat input

Pursuant to 326 IAC 6-2-4(a), for Q less than 10 million British thermal units per hour, Pt shall not exceed 0.6. Therefore, the PM emissions from the two (2) natural gas fired hot water boilers will be limited to 0.6 pounds per million British thermal unit.

Based on Appendix A, the potential PM emission rate is:

0.025 tons/yr × (2000 lbs/ton / 8760 hrs/yr) = 0.006 lbs/hr

(0.006 lbs/hr / 0.28 MMBtu/hr) = 0.020 lbs PM per MMBtu

Therefore, the two (2) boilers will comply with this rule.

326 IAC 6-3-2 (Process Operations)

Pursuant to CP 099-4592-00033, issued on November 2, 1995, the particulate matter (PM) from the coating operations shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10 P^{0.67}$

where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

The dry filters shall be in operation at all times when the spray coating in Process 1 and Process 3 is in operation, in order to comply with this limit.

326 IAC 8-1-6 (New Facilities; General reduction requirements)

The vinyl-coated foam products manufacturing source is subject to the requirements of 326 IAC 8-1-6. Pursuant to CP 099-4592-00033, issued on November 2, 1995, the Best Available Control Technology (BACT) for this source is the use of dip coating and airless spray applicators using coatings with a maximum VOC content of 6.98 pounds per gallon of coating less water. At that time, catalytic oxidation was considered economically not feasible. In order to increase production, Bremen Corporation will install a catalytic oxidizer at this source. BACT for this source will be the use of a catalytic oxidizer on Process 1, Process 2, Process 3 and Process 4, the use of dip coating at Process 2, the use of airless or high volume, low pressure spray guns or an application with a higher transfer efficiency at all spray applications, and the use of coatings with a maximum VOC content of 6.98 pounds per gallon of coating less water.

The catalytic oxidizer shall operate at all times when Process 1, Process 2, Process 3 and Process 4 are in operation. When operating, the catalytic incinerator shall maintain a minimum operating temperature of 550 degrees Fahrenheit or a temperature determined in the most recent stack test to maintain at least 95 percent destruction of VOC captured. In addition, the catalytic oxidizer shall be tested once every two and one half (2.5) years for efficiency using methods approved by the Commissioner.

326 IAC 8-3-2 (Organic Solvent Degreasing Operations)

Since the cold cleaner was constructed around 1985, the requirements of 326 IAC 8-3-2 are applicable. The owner or operator of the cold cleaning facility will be required to:

(a) Equip the cleaner with a cover;

(b) Equip the cleaner with a facility for draining cleaned parts;

(c) Close the degreaser cover whenever parts are not being handled in the cleaner;

(d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(e) Provide a permanent, conspicuous label summarizing the operating requirements;

(f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

326 IAC 8-3-5 (Organic Solvent Degreasing Operations)

Since this source is located in Marshall county and construction of the cold cleaner degreaser commenced prior to January 1, 1990, the requirements of 326 IAC 8-3-5 are not applicable. The requirements of 326 IAC 8-3-5(b) were discussed as applicable in page 4 of 5 of the calculations to CP 099-4592-00033, issued on November 2, 1995, but the rule is not addressed in that permit. The source will satisfy the requirements of 326 IAC 8-3-5(b) by complying with 326 IAC 8-3-2.

Compliance Requirements

Permits issued under 326 IAC 2-7are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

The dry filters and catalytic oxidizer have applicable compliance monitoring conditions as specified below:

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating stack 32 while one or more of the spray booths at Process 1 and Process 3 are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(c) Daily records of the thermal oxidizer internal combustion zone temperature shall be observed at least once per day when Process 1, 2, 3, or 4 is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, when operating, the catalytic incinerator shall maintain a minimum operating temperature of 550 degrees Fahrenheit or a temperature determined in the most recent stack test to maintain at least 95 percent overall control efficiency for VOC. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the

temperature reading is below 550 degrees Fahrenheit.

The instrument used for determining the temperature shall comply with Section C - Temperature Gauge Specifications, of the permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

(d) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

These monitoring conditions are necessary because catalytic oxidizer and dry filters must operate properly to ensure compliance that 326 IAC 2-2 (Prevention of Significant Deterioration) is not applicable and to ensure compliance with 326 IAC 8-1-6 (New facilities; general reduction requirements), 326 IAC 6-3-2 (Process Operations) and 326 IAC 2-7 (Part 70).

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

(a) This source will emit levels of air toxics greater than those that constitute major source applicability according to Section 112 of the 1990 Clean Air Act Amendments.

(b) See attached calculations for detailed air toxic calculations (pages 2, 4 and 6 of 6 of TSD Appendix A).

Conclusion

The operation of this vinyl-coated foam product manufacturing source shall be subject to the conditions of the attached proposed Significant Source Modification to a Part 70 operating permit, Permit No. 099-10314-00033.

Indiana Department of Environmental Management
Office of Air Management

Addendum to the
Technical Support Document for a Part 70 Significant Source Modification

Source Name:	**Bremen Corporation**
Source Location:	**405 North Industrial Drive, Bremen, Indiana 46506**
County:	**Marshall**
SIC Code:	**3069**
Significant Source Mod. No.:	**099-10314-00033**
Operation Permit No.:	**T 099-7476-00033**
Permit Reviewer:	**CarrieAnn Ortolani**

On July 24, 1999, the Office of Air Management (OAM) had a notice published in the Plymouth Pilot News, Plymouth, Indiana, stating that Bremen Corporation had applied for a Significant Source Modification to a Part 70 Operating Permit that has not been issued yet to increase capacity and operate a catalytic oxidizer at the existing vinyl-coated foam product manufacturing source. The notice also stated that OAM proposed to issue a Part 70 Significant Source Modification for this operation and provided information on how the public could review the proposed Part 70 Significant Source Modification and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this Part 70 Significant Source Modification should be issued as proposed.

Upon further review, the OAM has decided to make the following change to the Part 70 Operating Permit: The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language is **bolded)**:

Change 1:

A chart recorder which continuously documents the internal combustion temperature of the catalytic oxidizer should be used by this source. A daily record of the internal combustion zone temperature will not be sufficient to document compliance the VOC destruction requirements. Conditions D.1.11 and D.1.12 are revised as follows:

D.1.11 Parametric Monitoring

(a) ~~Daily~~ **Continuous** records of the thermal oxidizer internal combustion zone temperature shall be **kept using a chart recorder** ~~observed at least once per day~~ when Process 1, 2, 3, or 4 is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, when operating, the catalytic incinerator shall maintain a minimum operating temperature of 550 degrees Fahrenheit or a temperature determined in the most recent stack test to maintain at least 95 percent overall control efficiency for VOC. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the temperature reading is below 550 degrees Fahrenheit.

The instrument used for determining the temperature shall comply with Section C - Temperature Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

(b) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

D.1.12 Record Keeping Requirements

(a) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and the VOC emission limits established in Condition D.1.2.

(1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) A log of the dates of use;

(3) The cleanup solvent usage for each month;

(4) The total VOC usage for each month; and

(5) The weight of VOCs emitted for each compliance period.

(b) To document compliance with Conditions D.1.2, D.1.3, and D.1.10 the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

(c) To document compliance with Conditions D.1.1 and D.1.11, the Permittee shall maintain **continuous** records of the ~~daily~~ internal combustion zone temperature of the catalytic oxidizer or indicate that Processes 1, 2, 3, and 4 ~~were~~ **are** not in operation **at that time** ~~that day~~.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Change 2:

As a result of Change 1, Condition C.9 is added to the permit and the remainder of Section C is renumbered accordingly.

C.9 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this approval until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.

(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations

Company Na **Bremen Corporation**
Address City **405 North Industrial Drive, Bremen, Indiana 46506**
Source Modif **099-10314**
Plt ID: **099-00033**
Operating Pe **T099-7476-00033**
Reviewer: **CarrieAnn Ortolani**
Date: **November 5, 1998**

Material	Density (lbs/gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	Particulate Potential (tons/yr)	lbs VOC/gal solids	Transfer Efficiency
Processes Controlled by Catalytic																
Dip Room (Process 2)																
Two (2) Dip tanks, Paint (PDI 761)	9.00	8.50%	0.0%	8.5%	0.0%	92.00%	333.00000	1.000	0.77	0.77	254.75	6113.88	1115.78	0.00	0.83	100%
Two (2) Dip tanks, top coat (Top Co	7.23	96.50%	0.0%	96.5%	0.0%	2.70%	20.50000	1.000	6.98	6.98	143.03	3432.66	626.46	0.00	258.41	100%
One (1) Cleaning station (3563-Blen	6.96	100.00%	0.0%	100.0%	0.0%	0.00%	1.99000	1.000	6.96	6.96	13.85	332.41	60.66	0.00	n/a	100%
Spray Room (Process 1)																
Manual Paint Spray, Solvent (PDI F7	9.00	8.50%	0.0%	8.5%	0.0%	92.00%	129.00000	1.000	0.77	0.77	98.69	2368.44	432.24	1628.53	0.83	65%
Manual Paint Spray, Water (PDI F7(	8.97	12.90%	0.0%	12.9%	0.0%	75.00%	48.40000	1.000	1.16	1.16	56.01	1344.12	245.30	579.69	1.54	65%
Automatic Paint Spray, Solvent (PDI	9.00	8.50%	0.0%	8.5%	0.0%	92.00%	611.00000	1.000	0.77	0.77	467.42	11217.96	2047.28	7713.42	0.83	65%
Automatic Paint Spray, Water (PDI F	8.97	12.90%	0.0%	12.9%	0.0%	75.00%	133.00000	1.000	1.16	1.16	153.90	3693.56	674.07	1592.96	1.54	65%
Automatic Paint Spray, Top Coat (T(	7.23	96.50%	0.0%	96.5%	0.0%	3.00%	120.00000	1.000	6.98	6.98	837.23	20093.62	3667.08	46.55	232.57	65%
Final Finish Area (Process 3)																
One (1) Paint Spray (PDI F761)	9.00	8.50%	0.0%	8.5%	0.0%	92.00%	12.50000	1.000	0.77	0.77	9.56	229.50	41.88	157.80	0.83	65%
One (1) Paint Spray (PDI F830)	7.65	42.50%	0.0%	42.5%	0.0%	26.00%	31.90000	1.000	3.25	3.25	103.71	2489.16	454.27	215.11	12.50	65%
									PM Contol Effici	99.50%						
									VOC Contol Effi	95.00%						
State Potential Emissions			**Add worst case coating to all solvents**						**Uncontrolled**		**2138**	**51315**	**9365**	**11934**		
									Controlled		**107**	**2566**	**468**	**59.7**		

Material	Density (lbs/gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	Particulate Potential (tons/yr)	lbs VOC/gal solids	Transfer Efficiency
Uncontrolled Processes																
Area 1, Assembly Area																
Hand Application (Uniroyal DC1168	7.11	85.00%	0.0%	85.0%	0.0%	18.00%	16.60000	1.000	6.04	6.04	100.32	2407.73	439.41	0.00	33.58	100%
Four (4) Glue Spray (Con. Bond 77-	6.76	49.40%	0.0%	49.4%	0.0%	14.50%	2.08000	1.000	3.34	3.34	6.95	166.70	30.42	10.91	23.03	65%
Area 2, Assembly Area																
Hand Application (Uniroyal DC1168	7.11	85.00%	0.0%	85.0%	0.0%	0.00%	16.60000	1.000	6.04	6.04	100.32	2407.73	439.41	0.00	n/a	100%
Area 3, Final Finish Area																
One (1) Automatic Silk Screener (Na	10.10	56.40%	0.0%	56.4%	0.0%	26.00%	0.24500	1.000	5.70	5.70	1.40	33.49	6.11	0.00	21.91	100%
One (1) Manual Silk Screener (Naz I	10.10	56.40%	0.0%	56.4%	0.0%	26.00%	0.16300	1.000	5.70	5.70	0.93	22.28	4.07	0.00	21.91	100%
									PM Contol Effici	0.00%						
									VOC Contol Effi	0.00%						
State Potential Emissions			**Add worst case coating to all solvents**						**Uncontrolled**		**210**	**5038**	**919**	**10.9**		
									Controlled		**210**	**5038**	**919**	**10.9**		

Controlled Paint Mixing Process
Process 4

Since the flashoff factor from the painting processes is 1.0, the emissions from the mixing process are accounted for in the painting process.

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lbs/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lbs/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Appendix A: Emission Calculations
HAP Emission Calculations

Company Nan Bremen Corporation
Address City I 405 North Industrial Drive, Bremen, Indiana 46506
Source Modifi 099-10314
Plt ID: 099-00033
Operating Per T099-7476-00033
Reviewer: CarrieAnn Ortolani
Date: November 5, 1998

Material	Density (lbs/gal)	Gallons of Material (gal/unit)	Maximum (unit/hour	Weight % Xylene	Weight % MIBK	Weight % DEHP	Weight % Toluene	Weight % Glycol Ethe	Weight % MEK	Xylene Emissions (tons/yr)	MIBK Emissions (tons/yr)	DEHP Emissions (tons/yr)	Toluene Emissions (tons/yr)	Glycol Ethers Emissions (tons/yr)	MEK Emissions (tons/yr)
Processes Controlled by C															
Dip Room (Process 2)															
Two (2) Dip tanks, Paint (PD	9.00	**********	1.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Two (2) Dip tanks, top coat (	7.23	20.50000	1.000	50.00%	46.50%	0.00%	0.00%	0.00%	0.00%	324.59	301.87	0.00	0.00	0.00	0.00
One (1) Cleaning station (35	6.96	1.99000	1.000	0.00%	0.00%	0.00%	45.00%	0.00%	55.00%	0.00	0.00	0.00	27.30	0.00	33.37
Spray Room (Process 1)															
Manual Paint Spray, Solvent	9.00	**********	1.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Manual Paint Spray, Water (	8.97	48.40000	1.000	0.00%	0.00%	17.00%	0.00%	0.90%	0.00%	0.00	0.00	323.27	0.00	17.11	0.00
Automatic Paint Spray, Solv	9.00	**********	1.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Automatic Paint Spray, Wate	8.97	**********	1.000	0.00%	0.00%	17.00%	0.00%	0.90%	0.00%	0.00	0.00	888.32	0.00	47.03	0.00
Automatic Paint Spray, Top (	7.23	**********	1.000	50.00%	46.50%	0.00%	0.00%	0.00%	0.00%	1900.04	1767.04	0.00	0.00	0.00	0.00
Final Finish Area (Process															
One (1) Paint Spray (PDI F7	9.00	12.50000	1.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
One (1) Paint Spray (PDI F8	7.65	31.90000	1.000	8.40%	0.00%	0.00%	22.90%	0.00%	11.20%	89.79	0.00	0.00	244.77	0.00	119.71
Total State Potential Emissions						**Control Efficie**	**95.00%**		**Before Contro**	**2314**	**2069**	**1212**	**272**	**64.1**	**153**
									After Control:	**116**	**103**	**60.6**	**13.6**	**3.21**	**7.65**

Material	Density (lbs/gal)	Gallons of Material (gal/unit)	Maximum (unit/hour	Weight % MEK	Weight % Hexane	Weight % Toluene	Weight % Isophorone				Xylene Emissions (tons/yr)	Toluene Emissions (tons/yr)	Formaldehyde Emissions (tons/yr)	Benzene Emissions (tons/yr)
Uncontrolled Processes														
Area 1, Assembly Area														
Hand Application (Uniroyal D	7.11	16.60000	1.000	85.00%	0.00%	0.00%	0.00%				439.41	0.00	0.00	0.00
Four (4) Glue Spray (Con. B	6.76	2.08000	1.000	0.10%	40.70%	8.40%	0.00%				0.06	25.07	5.17	0.00
Area 2, Assembly Area														
Hand Application (Uniroyal D	7.11	2.09000	1.000	85.00%	0.00%	0.00%	0.00%				55.32	0.00	0.00	0.00
Final Finish Area														
One (1) Automatic Silk Scree	10.10	0.24500	1.000	0.00%	0.00%	0.00%	45.00%				0.00	0.00	0.00	4.88
One (1) Manual Silk Screene	10.10	0.16300	1.000	0.00%	0.00%	0.00%	45.00%				0.00	0.00	0.00	3.24
						Control Ef	**0.00%**		**Before Co**		**495**	**25.1**	**5.17**	**8.12**
									After Cont		**495**	**25.1**	**5.17**	**8.12**

Total HAP Emissions (tons per year)

	Xylene	MIBK	DEHP	Toluene	Glycol Ether	MEK	Formaldehyd	Benzene	Total
Before Contro	**2809**	**2069**	**1212**	**297**	**64.1**	**153**	**5.17**	**8.12**	**6617**
After Control:	**611**	**103**	**60.6**	**38.7**	**3.21**	**7.65**	**5.17**	**8.12**	**837**

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lbs/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler

Company Nai Bremen Corporation
Address City 405 North Industrial Drive, Bremen, Indiana 46506
Source Modif 099-10314
Plt ID: 099-00033
Operating Pe T099-7476-00033
Reviewer: CarrieAnn Ortolani
Date: November 5, 1998

Catalytic Oxidizer

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
4.6	40.3

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.038	0.153	0.012	2.01	0.111	1.69

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
above
emission

See following page for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler
HAPs Emissions

Company Nai **Bremen Corporation**
Address City **405 North Industrial Drive, Bremen, Indiana 46506**
Source Modif **099-10314**
Plt ID: **099-00033**
Operating Pe **T099-7476-00033**
Reviewer: **CarrieAnn Ortolani**
Date: **November 5, 1998**

Catalytic Oxidizer

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	4.231E-05	2.418E-05	1.511E-03	3.627E-02	6.850E-05

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	1.007E-05	2.216E-05	2.821E-05	7.656E-06	4.231E-05

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler

Company Na: Bremen Corporation
Address City 405 North Industrial Drive, Bremen, Indiana 46506
Source Modif 099-10314
Plt ID: 099-00033
Operating Pe T099-7476-00033
Reviewer: CarrieAnn Ortolani
Date: November 5, 1998

Air makeup

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
14.3	124.8

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.119	0.474	0.037	6.24	0.343	5.24

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Heaters and conveyor line

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
2.4	21.0

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.020	0.080	0.006	1.05	0.058	0.883

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Two (2) boilers

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
0.6	4.9

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.005	0.019	0.001	0.25	0.013	0.21

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
above
emission

See next page for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler
HAPs Emissions

Company Nai **Bremen Corporation**
Address City **405 North Industrial Drive, Bremen, Indiana 46506**
Source Modif **099-10314**
Plt ID: **099-00033**
Operating Pe **T099-7476-00033**
Reviewer: **CarrieAnn Ortolani**
Date: **November 5, 1998**

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	1.583E-04	9.046E-05	5.653E-03	1.357E-01	2.563E-04

HAPs - Metals

	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	3.769E-05	8.292E-05	1.055E-04	2.864E-05	1.583E-04

Methodology is the same as previous page.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.